

Fig. 1



Fig. 3

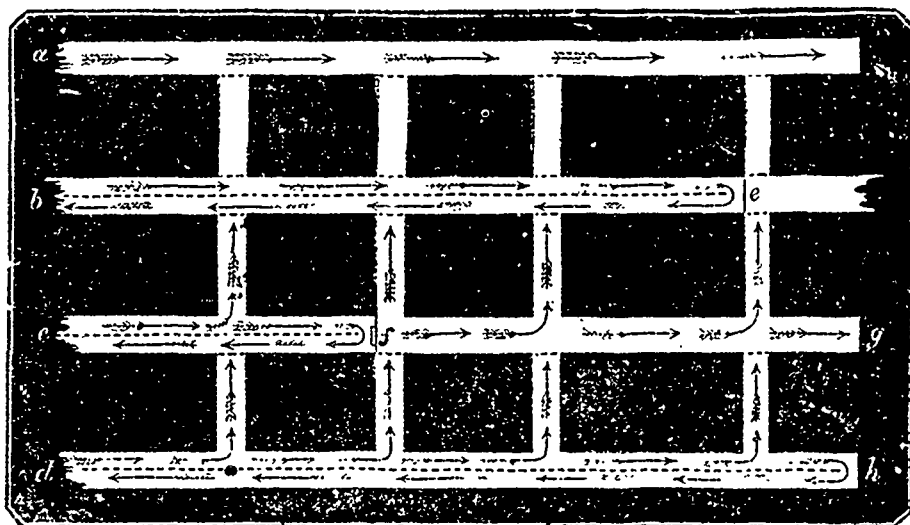


Fig. 2

child, and living beings are projected bodily through frameworks of wood just as if they were solid inanimate substances. The destruction of life, as it were in a moment, is frightful, one or two hundred lives being sometimes lost on these occasions. There are two remedies—ventilation and the safety lamps. The former we have already discussed. The latter, as is well known, consists merely of a lamp whose flame is enclosed within a framework of fine wire gauze, about 500 apertures to the square inch of surface. Even with the most improved lamps of this description the danger is not entirely removed. The same fuel of coal which releases the gases may

break a lamp and expose the flame, and thus cause an explosion.

The principal danger, however, arises from the men removing the wire gauze from their lamps in order to light their pipes or to see the better. This has been the cause of many accidents, and several lamps have been constructed specially adapted to prevent the possibility of their being tampered with or opened by the miner without first extinguishing the light, thus preventing all risk of explosion in the mine from the exposure of the naked flame. Fig. 6 represents one of the latest of these inventions. Tate's Patent safety lamp. There